



OPERATING PERMIT Issued Pursuant to Tennessee Air Quality Act

Date Issued: April 30, 2015

Permit Number:
069753P

Date Expires: January 1, 2025

Issued To:
Eagle Bend Mfg. Inc.

Installation Address:
1000 JD Yarnell Industrial Parkway
Clinton

Installation Description:
One (1) Internal Combustion
Natural Gas Fired 50 hp Emergency
Generator Engine at IT

Emission Source Reference No.
01-0235-02
NESHAP 40 CFR 63 Subpart ZZZZ

The holder of this permit shall comply with the conditions contained in this permit as well as all applicable provisions of the Tennessee Air Pollution Control Regulations.

CONDITIONS:

1. The application that was utilized in the preparation of this permit is dated November 24, 2014, and is signed by Ed Steinebach, General Manager for the permitted facility. If this person terminates employment or is assigned different duties and is no longer the responsible person to represent and bind the facility in environmental permitting affairs, the owner or operator of this air contaminant source shall notify the Technical Secretary of the change. Said notification shall be in writing and submitted within thirty (30) days of the change. The notification shall include the name and title of the new person assigned by the source owner or operator to represent and bind the facility in environmental permitting affairs. All representations, agreement to terms and conditions and covenants made by the former responsible person that were used in the establishment of limiting permit conditions on this permit will continue to be binding on the facility until such time that a revision to this permit is obtained that would change said representations, agreements and covenants.

TAPCR 1200-03-09-.02(3)

(conditions continued on next page)


TECHNICAL SECRETARY

No Authority is Granted by this Permit to Operate, Construct, or Maintain any Installation in Violation of any Law, Statute, Code, Ordinance, Rule, or Regulation of the State of Tennessee or any of its Political Subdivisions.

NON-TRANSFERABLE

POST AT INSTALLATION ADDRESS

2. The stated design power output capacity for this existing emergency internal combustion ignition engine is 50 horsepower (hp). Any increase in this capacity will require a construction permit.

TAPCR 1200-03-09-.02(6) and the application dated November 24, 2014, from the permittee.

3. Only natural gas shall be used as fuel for this source.

TAPCR 1200-03-09-.02(6) and the application dated November 24, 2014, from the permittee.

4. Particulate Matter (TSP) emitted from this source shall not exceed 0.6 pound per million British thermal units (lb/MMBtu) of heat input (0.08 pound per hour). Compliance with this emission limit shall be assured by compliance with **Conditions 2 and 3** and the records required by **Conditions 10 and 18**.

TAPCR 1200-03-06-.02(2)

5. Carbon Monoxide (CO) emitted from this source shall not exceed 0.26 pound per hour (lb/hr). Compliance with this emission limit is based on compliance with **Conditions 2 and 3**, the records required by **Conditions 10 and 18**, and **EPA AP-42, Tables 3.2-2 and 3.2-3**, Uncontrolled Emission Factors for 4-Stroke Engines.

TAPCR 1200-03-07-.07(2)

6. Nitrogen Oxides (NO_x) emitted from this source shall not exceed 0.4 lb/hr. Compliance with this emission limit is based on compliance with **Conditions 2 and 3**, the records required by **Conditions 10 and 18**, and **EPA AP-42, Tables 3.2-2 and 3.2-3**, Uncontrolled Emission Factors for 4-Stroke Engines.

TAPCR 1200-03-07-.07(2)

7. Volatile Organic Compounds (VOC) emitted from this source shall not exceed 0.01 lb/hr. Compliance with this emission limit is based on compliance with **Conditions 2 and 3**, the records required by **Conditions 10 and 18**, and **EPA AP-42, Tables 3.2-2 and 3.2-3**, Uncontrolled Emission Factors for 4-Stroke Engines.

TAPCR 1200-03-07-.07(2)

8. Visible emissions from this source shall not exhibit greater than twenty percent (20%) opacity, except for one (1) six-minute period in any one (1) hour period and for no more than four (4) six-minute periods in any twenty-four (24) hour period. Visible emissions from this source shall be determined by EPA Method 9, as published in the current 40 CFR 60, Appendix A (six-minute average).

TAPCR 1200-03-05-.01(1) and 1200-03-05-.03(6)

9. This source is subject to the requirements of 40 CFR Part 63, Subpart ZZZZ – National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.

TAPCR 1200-03-09-.03(8) and 40 CFR 63 Subpart ZZZZ

Compliance Method: This existing emergency engine (**commenced construction or reconstruction of the engine before June 12, 2006**) shall comply with the provisions of 40 CFR 63 Subpart ZZZZ – National Emissions Standards for Hazardous Air Pollutants (HAP) for Stationary Reciprocating Internal Combustion Engines (RICE).

These provisions include, but are not limited to, the items specified in the **Table 2d** below as required by 40 CFR 63 Subpart ZZZZ - §63.6603(a).

Table 2d of Subpart ZZZZ of Part 63, Requirements for Existing Emergency Stationary RICE Located at Area Sources of HAP Emissions:

Source I.D.	The permittee must meet the following requirements from item 5 of Table 2d
One (1) Natural Gas Fired Emergency Internal Combustion Engine* Rated at 50 hp	a. Change oil and filter every 500 hours of operation or annually, whichever comes first; ¹
	b. Inspect spark plugs every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and
	c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

¹Sources have the option to utilize an oil analysis program as described in §63.6625(j) in order to extend the specified oil change requirement.

*If the emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required in **Table 2d** of Subpart ZZZZ of 40 CFR 63, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under Federal, State, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under Federal, State, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. Sources must report any failure to perform the management practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable.

10. The permittee shall keep records of maintenance conducted on this existing stationary emergency generator engine in order to demonstrate that the engine was maintained according to the requirements of Table 2d to 40 CFR 63 Subpart ZZZZ specified in **Condition 9**. Inspections and maintenance activities shall be entered in the log within 7 days of each inspection or repair. The permittee shall retain these records for a period of not less than five (5) years, and these records shall be kept available at the source location for inspection by the Technical Secretary or a Division representative.

TAPCR 1200-03-10-.02(2)(a)

11. Pursuant to 40 CFR 63 Subpart ZZZZ - §63.6605(a), the permittee shall comply with the operating limitations in 40 CFR 63 Subpart ZZZZ which apply at all times.

TAPCR 1200-03-09-.03(8) and 40 CFR 63 Subpart ZZZZ - §63.6605(a)

12. Pursuant to 40 CFR 63 Subpart ZZZZ - §63.6605(b), at all times the permittee must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the permittee to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

TAPCR 1200-03-09-.03(8) and 40 CFR 63 Subpart ZZZZ - §63.6605(b)

13. Pursuant to 40 CFR 63 Subpart ZZZZ - §63.6625(e), the permittee shall operate and maintain the engine and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or the permittee may develop and follow its own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

TAPCR 1200-03-09-.03(8) and 40 CFR 63 Subpart ZZZZ - §63.6625(e)

14. Pursuant to 40 CFR 63 Subpart ZZZZ - §63.6625(f), the permittee shall install a non-resettable hour meter for this emergency engine if one is not already installed.

TAPCR 1200-03-09-.03(8) and 40 CFR 63 Subpart ZZZZ - §63.6625(f)

15. Pursuant to 40 CFR 63 Subpart ZZZZ - §63.6625(h), the permittee shall minimize the engines's time at idle during start-up and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all other times other than startup in Table 2d of 40 CFR 63 Subpart ZZZZ shall apply.

TAPCR 1200-03-09-.03(8) and 40 CFR 63 Subpart ZZZZ - §63.6625(h)

16. Pursuant to 40 CFR 63 Subpart ZZZZ - §63.6625(j), the permittee has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Table 2d to this subpart. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Acid Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Acid Number increases by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from the Total Acid Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the permittee is not required to change the oil. If any of the limits are exceeded, the permittee must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the permittee must change the oil within 2 business days or before commencing operation, whichever is later. The permittee must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

TAPCR 1200-03-09-.03(8) and 40 CFR 63 Subpart ZZZZ - §63.6625(j)

17. Pursuant to 40 CFR 63 Subpart ZZZZ - §63.6640(a), the permittee must demonstrate continuous compliance with each requirement in **Table 2d to Subpart ZZZZ** according to the work or management practices in Item 9 of Table 6 to this subpart.

TAPCR 1200-03-09-.03(8) and 40 CFR 63 Subpart ZZZZ - §63.6640(a)

Compliance Method: The permittee shall comply with the applicable requirements of Table 6 to 40 CFR 63 Subpart ZZZZ per the following table:

Table 6 to Subpart ZZZZ of Part 63, Continuous Compliance with Emission Limitations, and Other Requirements for Existing Emergency Stationary RICE Located at Area Sources of HAP Emissions:

Source I.D.	Complying with the requirement to ...	The permittee must demonstrate continuous compliance by
One (1) Natural Gas Fired Emergency Internal Combustion Engine Rated at 50 hp	From Item 9 of Table 6: a. Work or management practices	i. Operating and maintaining the stationary RICE according to the manufacturers emission-related operation and maintenance instructions; or
		ii. Develop and follow your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

18. Pursuant to 40 CFR 63 Subpart ZZZZ - §63.6655(d) and (e), the permittee shall keep records of maintenance conducted on this existing stationary emergency generator engine in order to demonstrate that the engine was maintained according to the manufacturer's requirements or the permittee's own developed maintenance plan specified in **Conditions 13 and 17**. Inspections and maintenance activities shall be entered in the log within 7 days of each inspection or repair. The permittee shall retain these records for a period of not less than five (5) years, and these records shall be kept available at the source location for inspection by the Technical Secretary or a Division representative.

TAPCR 1200-03-10-.02(2)(a), TAPCR 1200-03-09-.03(8), and 40 CFR 63 Subpart ZZZZ - §63.6655(d) and (e)

19. The permittee must operate the emergency stationary internal combustion engine (ICE) according to the requirements in paragraphs (a) through (c) of this condition. In order for the engine to be considered an emergency stationary ICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (a) through (c) of this condition, is prohibited. If the permittee does not operate the engine according to the requirements in paragraphs (a) through (c) of this condition, the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.
- (a) There is no time limit on the use of emergency stationary ICE in emergency situations.
 - (b) The permittee may operate the emergency stationary ICE for any combination of the purposes specified in paragraphs (1) through (3) below for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph (c) of this condition counts as part of the 100 hours per calendar year allowed by this paragraph.
 - (1) Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The permittee may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the permittee maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year.
 - (2) Emergency stationary ICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see §60.17), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.
 - (3) Emergency stationary ICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.
 - (c) Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (b)(2) of this condition. The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

TAPCR 1200-03-09-.03(8) and 40 CFR 63 Subpart ZZZZ - §63.6640(f)

20. Pursuant to 40 CFR 63 Subpart ZZZZ - §63.6655(f), the permittee must keep monthly records of the hours of operation of the engine that is recorded through the non-resettable hour meter (non-resettable electronic means of record is allowed) to demonstrate compliance with **Condition 19**. The permittee must document how many hours are spent for the following categories: (a) emergency operation, (b) maintenance checks and readiness testing and (c) non-emergency operation. The permittee shall calculate the operating hours per calendar year. The permittee shall record this information in the following format or an alternative format which readily provides the same required information. The permittee shall retain these records for a period of not less than five (5) years, and these records shall be kept available at the source location for inspection by the Technical Secretary or a Division representative. All data, including all required calculations, must be entered in the log no later than 30 days from the end of the month for which the data is required.

Table 1				
Year:				
Month	Operating Hours per Month			Comments**
	Maintenance checks & readiness testing	Other non-emergency operation	Emergency operation	
January				
February				
etc.				
Totals				
** The permittee must document how many hours are spent for emergency operation; including what classified the operation as emergency and how many hours are spent for non-emergency operation.				

Table 2	
Year:	
Month	Operating Hours per Month
	Maintenance checks & readiness testing and other non-emergency operation **
January	
February	
Etc.	
Total	
** Sum of operating hours in columns 2 and 3 in Table 1 above for each month	

TAPCR 1200-03-10-.02(2)(a), TAPCR 1200-03-09-.03(8), and 40 CFR 63 Subpart ZZZZ - §63.6655(f)

21. (a) Pursuant to 40 CFR 63 Subpart ZZZZ - §63.6660(a), the permittee's records must be in a form suitable and readily available for expeditious review according to 40 CFR §63.10(b)(1);
- (b) Pursuant to 40 CFR 63 Subpart ZZZZ - §63.6660(b), the permittee must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record, as specified in 40 CFR §63.10(b)(1); and
- (c) Pursuant to 40 CFR 63 Subpart ZZZZ - §63.6660(c), the permittee must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR §63.10(b)(1).

TAPCR 1200-03-09-.03(8) and 40 CFR 63 Subpart ZZZZ - §63.6660(a), (b), and (c)

22. This source shall comply with all applicable state and federal air pollution regulations. This includes, but is not limited to, federal regulations published under 40 CFR 63 for sources of hazardous air pollutants and 40 CFR 60, New Source Performance Standards.

TAPCR 1200-03-09-.03(8)

23. This source shall operate in accordance with the terms of this permit and the information submitted in the approved permit application dated November 24, 2014, from the permittee.

TAPCR 1200-03-09-.02(3)

24. This permit is valid only at this location.

TAPCR 1200-03-09-.03(6)

25. The permittee shall apply for renewal of this permit not less than sixty (60) days prior to the permit expiration date. The renewal application shall be submitted to the East Tennessee Permit Program at the address listed below or via e-mail.

East Tennessee Permit Program
Division of Air Pollution Control
William R. Snodgrass Tennessee Tower
312 Rosa L. Parks Avenue, 15TH Floor
Nashville, TN 37243

or

Adobe Portable Document Format (PDF)
Copy to: Air.Pollution.Control@tn.gov

TAPCR 1200-03-09-.02(3)(a)

(end of conditions)

The permit application gives the location of this source as 36° 05' 23.95" N Latitude and 84° 07' 08.09" W Longitude.